Virginia:

AT A CONTINUED MEETING of the Nelson County Broadband Authority Board at 6:00 p.m. in the General District Courtroom located on the third floor of the Nelson County Courthouse, Lovingston Virginia.

Present: Thomas H. Bruguiere, Jr. – Vice Chair

Thomas D. Harvey, North District – Chair

Allen M. Hale – East District Larry D. Saunders, South District Gary W. Strong – Central District

Stephen A. Carter, County Administrator

Candice W. McGarry, Secretary Debra K. McCann, Treasurer

Susan Rorrer, Director of Information Systems Andrew Crane, Information Systems Specialist

Absent: None

I. Call to Order

Mr. Hale called the meeting to order at 6:00 PM with all members present to establish a quorum.

II. Public Hearing: Proposed Schedule of Wholesale Rates, Fees, and Charges to receive input from all of the users of the Nelson County Broadband Authority's (NCBA) Network facilities; the owners, tenants or occupants of property served or to be served thereby; and all others interested on the proposed NCBA schedule of wholesale rates, fees and charges as publicly advertised.

Mr. Carter noted that the Authority was set to conduct a public hearing on the proposed revisions to its rate schedule. He noted that the revisions had been advertised per state law and Ms. Rorrer would overview the changes and take questions prior to the public hearing.

Ms. Rorrer noted that the proposed rates and public hearing had been advertised in October and the change in rates was in order for the network to be attractive to ISPs and conducive to the operations of the NCBA.

She noted the proposed rates and changes as follows:

Local Wholesale Access Rates (Rates for Providers to Utilize the Network for Transport to an End User):

	NCBA Proposed Service Types					
Service Tier	Service Class	Service Type	Recommended Wholesale Cost	Comment		
Tier 1	Residential GPON	25/5 Mbps	\$25	Best Effort (maximum 32:1 split)		
	Residential GPON	1000/1000 Mbps	\$37	Best Effort, symmetric (maximum 32:1 split)		
Tier 2	Business GPON	25/25 Mbps	\$75	higher priority than Best Effort (maximum 16:1 split)		
	Business GPON	50/50 Mbps	\$150	higher priority than Best Effort (maximum 16:1 split)		
	Business GPON	100/100 Mbps	\$300	higher priority than Best Effort (maximum 16:1 split)		
Tiel Z	Dedicated Business	250/250 Mbps	\$450	Active Ethernet, higher priority than Best Effort		
	Dedicated Business	500/500 Mbps	\$850	Active Ethernet, higher priority than Best Effort		
	Dedicated Business	1000/1000 Mbps	\$1000	Active Ethernet, higher priority than Best Effort		
Tier 3	Wide Area LAN Service	100/100 Mbps	\$400	Active Ethernet, highest priority, supports QinQ (two or more connections may be needed)		
	Wide Area LAN Service	500/500 Mbps	\$640	Active Ethernet, highest priority, supports QinQ (two or more connections may be needed)		
	Wide Area LAN Service	1000/1000 Mbps	\$830	Active Ethernet, highest priority, supports QinQ (two or more connections may be needed)		

Service Types:

- **Tier 1** Transport service from the service provider's port in the data center to a single customer location. Traffic is untagged at the customer. Circuit is typically asymmetric and priority is set at Best Effort across the core network. NCBA will observe a maximum 32:1 split.
- **Tier 2** Transport service from the carrier or provider's port in the colo to a single customer location. Traffic is untagged at the customer. GPON circuits are symmetric and the priority is set higher than Tier 1 for better performance across the core network. NCBA will observe a maximum 16:1 split on this

service tier for GPON connections. Active Ethernet connections are symmetric and have a higher traffic priority than Tier 1 services. An example of this is a package of Internet access for a business with regular use of videoconferencing, heavy cloud-based service use, and large file uploads.

• **Tier 3** – Transport service between the carrier or provider's port in the colo as well as between multiple customer locations (fee applies for each end-point outside of provider's NNI). Passed traffic can be tagged or untagged as well as supporting Q-in-Q. The circuit is symmetric and traffic has the highest priority across the core network. An example of this would be a transparent LAN service to link two customer locations.

Non-Recurring Charges:

Non-recurring charges (NRC) are those costs incurred in connection with the installation of the fiber drop and ONT. The customer will be responsible for the payment of these cost on the following terms.

NRC not exceeding \$1500 will be discounted as follows:

Term of Contract	<u>Discount</u>	
12 months	none	
24 months	10%	
36 months	20%	
48 months	35%	
60 or more months	50%	

The undiscounted balance of NRC together with any NRC in excess of \$1500 may be amortized over the term of the original contract.

Colocation Charges for Providers within NCBA shelters:

Quantity	Monthly Cost
2 RU	\$75.
One-half rack	\$200.
Full Rack	\$350.

All rentals are based on a space available basis. Rental will include access to one 20 amp, 120 volt circuit. Redundant CC power (-48 volt) will be available as well. The Colocation charges include up to 20 amps of DC power. Additional DC power, subject to availability, will be priced at \$6.25 per amp in 10 amp increments.

Tower Access:

Option 1:

Location on Tower	Price per Month per Customer		
Top thirty feet in 10 feet sections	\$275 per antenna for first three antennas		
	(includes cables and ancillary equipment such		
	as tower mounted amplifiers) \$150 per		
	additional antenna installed by the same		
	lessee.		
Next thirty feet in 10 foot sections	\$175 per antenna for first three antennas		
	(includes cables and ancillary equipment such		
	as tower mounted amplifiers) \$90 per		
	additional antenna installed by the same		
	lessee.		
Remaining access in 10 foot sections	\$50 per antenna (includes cables and ancillary		
	equipment such as tower mounted amplifiers)		

All tower access charges are in addition to a site access fee of \$200 per month. Site access fee entitles lessee access to electric power (contracted for by lessee) and ground space for cabinet (10 square feet). Shelter colocation charges and local transport charges are additional as are lease space for placing shelters, generators or other equipment. Items not specifically addressed will be priced on an individual basis.

Preference will be given to providers wishing space higher on the towers. The NCBA may limit the size of antennas or duration of leases for antennas located below the top 80 feet.

Tower leases will be accepted based on maximum allowable loading of a tower. If, in the sole discretion of the NCBA, an analysis of the structural integrity of the tower is deemed necessary, then the costs of the analysis will be borne by the lessee.

Option 2:

WIRELESS INTERNET SERVICE PROVIDERS (WISPs) may enter a master lease for tower space on all NCBA owned or operated towers. The tower access charge under the master lease (the "Master Tower Access Charge") shall be \$2,000 per month. For each tower the NCBA adds to its system subsequent to the adoption of this rate schedule, the Master Tower Access Charge shall automatically increase by \$250 per month. The Master Tower Access Charge also includes any colocation charges in available shelters and cabinets located at the tower sites as well as 10 square feet of ground space for lessee's cabinet. The location of the tower space leased pursuant to this paragraph shall be determined in the sole discretion of the NCBA. If, in the sole discretion of the NCBA, an analysis of the structural integrity of a tower is deemed necessary, then the costs of the analysis will be borne by the lessee.

These rates apply to towers operated by the NCBA. Rates for towers leased by the NCBA may be subject to approval by the lessor.

Increase in Rates:

Rates are firm for a contract or lease term which does not exceed five years.

For contract and lease terms exceeding five years, the contract or lease shall provide for either of the following payment adjustments: (a) if an extension of an original term is month-to-month or year-to-year, then beginning with the first month of the extension, payment shall be increased 3%, and thereafter by 3% on each subsequent annual anniversary, or (b) if the term is for five years with a right of renewal in five year increments, then upon each renewal payment shall be increased 12%.

Penalty and Interest:

Any sum due NCBA and unpaid by the due date shall be assessed a 10% penalty and carry interest at the rate of 12% *per annum*.

Ms. Rorrer noted that in regards to Dark Fiber, there had been some discussion and indecision on whether or not this was good for the Authority. She noted that they had a few customers who have requested the leasing of Dark Fiber and staff had not determined if it would be a good thing. She noted that staff had included provisions for these with recommended rates and terms that were recommended by Design Nine.

She then noted that staff had made other proposed changes to the rate schedule since the public hearing was advertised as follows:

She noted that upon further review and consideration of the proposed rates and by strong recommendation of the NCBA's consultant, County staff recommend the following modifications to the Residential GPON 1000 x 1000 service and the Business GPON 25 x 25 service. The recommended changes to the advertised rate schedule are highlighted below.

Service Tier	Service Class	Service Type	Recommended Wholesale Cost	Comment
Tier 1	Residential GPON	1000/50 Mbps		Best Effort, symmetric (maximum 32:1 split)
Tier 2	Business GPON	25/25 Mbps		higher priority than Best Effort (maximum 16:1 split)

She added that consideration of dark fiber leases is not recommended and County staff recommends approval of the rates as advertised with modification as noted above.

Ms. Rorrer then advised that the Tier 1 50/10 was in the current rate schedule and was omitted from the proposed one. She added that the two did not drastically differ; however the rates were better defined.

Mr. Strong then asked if there were any Tier 3 subscribers yet and Ms. Rorrer stated that all of the schools were on Tier 3 circuits.

Mr. Bruguiere then asked if the concern regarding Dark Fiber leasing was using up capacity and Ms. Rorrer noted there was some concern about that; but the Authority was not in jeopardy of running out. She noted that the current rates and proposed language limited the amount that could be leased. She noted that Design Nine recommended leasing of a finite amount and suggested it be tabled for future consideration; as it was not advantageous presently. She noted that if the Authority was so inclined, they could think about it some more and could consider it again at the next meeting. Mr. Strong thought that was a good idea and he was concerned about open access since if an ISP leased dark fiber and provided services to a community it would not be open access at that point. He added that was something to think about and a reason to do what Mr. Carter had suggested. He noted that on the other hand, leasing Dark Fiber could expand the network's outreach faster which was an objective of the Board. Ms. Rorrer suggested that staff could modify the conditions more to place other restrictions on its use etc. Mr. Bruguiere questioned whether or not the fiber would be opened up to all or not if it were leased to one person. Mr. Carter added that the question was would the Authority be able to restrict it or not.

Mr. Harvey then opened the public hearing and the following persons were recognized:

1. Sarah Holman, Nellysford resident and Nelson County Cablevision

Ms. Holman spoke regarding the Tier 1 Residential GPON 1000/50 package and noted that from a customer service standpoint as an ISP, they did not want any more phone calls about service not being to the consumers' level. She added that until they were positive that all had been resolved; she suggested that it not be offered. She added that they had subscribers who ran speed tests all day long and called about it. She then noted that she thought the wholesale rate for that package was too low; noting that a Gig was an elite service and people would pay a premium for it and they should treat it as such.

2. Clay Stewart, Acelanet/SCS Broadband

Mr. Stewart noted he had a different take on it. He noted that they had already invested in contracts to support this and they had to consider the impact was the costs in revisiting contracts and SLAs. He added that a negative piece for him was that they would have to purchase expensive equipment that would support these offerings and would be an additional cost.

He then stated on a positive note, they had a current problem with the pricing and this would be an opportunity. He then went on to say that they had a control box at each home to address support issues and another positive note was to be able to increase profit levels and give customers more of a choice.

He noted that they could purchase a gig for a customer, could break packages down, and could make more money. Mr. Stewart added that he had everyone on plan 1 right now and he thought that with the new rates, they would be able to move people to higher plans. Mr. Stewart then advised that they currently lost money on installs and made \$20 per month gross profit; with this they would be able to branch out into multiple plans. Mr. Stewart then noted that he was in favor of the rate changes and noted that they had signed contracts to be able to provide it. He added that he saw it as a great opportunity to expand the NCBA network because of being able to offer more plans and offer more choices.

Mr. Carter then asked if he favored the gig residential rate as is or if he had concerns. Mr. Stewart then indicated he liked the \$37 rate.

Mr. Strong asked for clarification on people getting streaming from them and not directly from Atlanta? Mr. Stewart noted that he had a contract for bandwidth with Streaming Exchange which reduced costs on for dedicated Internet.

3. Joe Lee McClellan, Nelson Cablevision

Mr. McClellan advised that he thought Dark Fiber leasing was in the best interest of NCBA and he suggested that they require a minimum mileage and timeframe in the lease. He added that they should continue to have a discounted rate amortized for up to five (5) years as in the past and have a fee for fewer years.

Ms. Rorrer then noted the information presented earlier that included leasing a limited number of fibers. She added that technology would allow transmission two ways and two fibers were not needed.

There being no other persons wishing to be recognized, the public hearing was closed.

Mr. Harvey then stated he thought it would be appropriate to give the Internet Service Providers a chance to respond to these changes in writing and then have Design Nine review them. He added that the NCBA had to get Internet service out to the citizens by fiber or wireless and he agreed with Mr. McClellan that they needed to continue to offer the discount. Mr. Carter then confirmed that the discount was proposed to remain in effect. Mr. Harvey noted that the intent of offering the discount was to get more customers and he noted that was working.

Mr. Carter then advised that the NCBA could continue the meeting in February instead of waiting until March; which would give a thirty (30) day period for input and responses. Mr. Carter then noted that one of the basis to change the gigabit service was what Ms. McClellan noted about the price being too low and the asymmetry of the circuit offering. He reiterated that Ting had indicated that they would not be offering any services in the County for a year.

Members then agreed by consensus to continue the meeting until February 14, 2017 to consider this subject further.

III. Other Business (As May Be Presented)

There was no Other Business considered by the Authority.

IV. Adjournment

At 6:40 PM, Mr. Strong moved to adjourn and continue the meeting until February 14, 2017 at 1pm and Mr. Bruguiere seconded the motion.

Members then agreed it was a good idea to take written comments from the ISPs and have Design Nine look at them.

There being no further discussion, Members voted unanimously (5-0) by roll call vote to approve the motion and the meeting adjourned.